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## N THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: FORD, GARRETT N.

DOCKET NO.: 122142.00008

SERIAL NO.: 10/743,570

FILED: 12/22/2003

EXAMINER: NGUYEN, SON T.

ART UNIT: 3643

TITLE: SHOCK-ABSORBING BUSHING FOR STIRRUP

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 Gavin J. Milczarek-Desai Quarles & Brady Streich Lang One South Church Ave. Suite 1700

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### CERTIFICATE OF MAILING

I hereby certify that on the <u>3rd</u> day of <u>March</u>, 2006, this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Mail Stop Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Alice B. Vanicek

## TRANSMITTAL OF REPLY BRIEF

Dear Sir:

Pursuant to the provisions of 37 C.F.R. 41.41, the appellant is hereby submitting three (3) copies of a Reply Brief to the Examiner's Answer in the above-captioned patent application.

Respectfully submitted,

Gavin Milczarek-Desai

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I hereby certify that on this 3 day of March, 2006, this correspondence is being transmitted via facsimile (571-273-8300) to the United States Patent and Trademark Office, Attn: Len Tran (Art Unit 1725).

Alice B. Vanicek

## TO THE COMMISSIONER FOR PATENTS

#### **REPLY BRIEF**

Dear Sir:

This is in response to the Examiner's Answer dated 06 January 2006.

#### REMARKS

A. In Response to Argument on Page 3 of the Examiner's Answer, the Patent and Trademark Office states the following with reference to claims 13 and 14:

MPEP Section 2114 [R-1] states that "APPARATUS CLAIMS MUST BE STRUCTURALLY DISTINGUISHABLE FROM THE PRIOR ART", which in Appellant's case it is not. Appellant's apparatus claims have nothing that are structurally distinguishable from Bowman's teaching because, both Appellant and Bowman teach a bushing comprising an inner sleeve (ref. 16 in Bowman's), an outer sleeve (ref. 11a,b in Bowman's), substantially concentric with the inner sleeve, and a plurality of longitudinal ribs (ref. 18 in Bowman's) connecting the inner and outer sleeves.

The appellant believes that, in accordance with MPEP Section 2114 [R-1], claims 13 and 14 are structurally distinguishable from Bowman. To begin with, the Bowman patent itself makes a distinction between the bushing 14 and the element 11a,11b which the Patent and Trademark Office considers to be an outer sleeve of the bushing 14. Thus, in lines 4-5 of column 2 Bowman states the following:

"In the hub 11 I place my improved self-centering bushing indicated generally in the drawing by the numeral 14."

(Note by the appellant: please observe from the description of FIG. 4 of Bowman that the hub 11 of FIGS. 1 and 2 is the same as the hub 11a,11b of FIG. 4).

Furthermore, the Board's attention is respectfully directed to lines 28-36 in column 2 of Bowman where the following is disclosed:

"In FIG. 4 I show a hub member 11a which has an eccentrically disposed bore 11b therein, this eccentricity resulting either from rough manufacturing of the hub 11a or otherwise. As shown, when my improved bushing is simply inserted into such a rough or eccentric bore the splines on the major axis sides of the eccentric bore are deflected less than are the splines 18 on the minor axis side of such eccentric bore."

It is clear from the preceding teachings of Bowman that the bushing 14 and the hub 11a,11b of the reference are two distinct components and that, contrary to the assertion of the Patent and Trademark Office, the hub 11a,11b of Bowman does not constitute an outer sleeve of the bushing 14.

Moreover, as pointed out above, the hub 11a,11b in FIG. 4 of Bowman is the same as the hub 11 in FIG. 2 of the reference. Since the hub 11 is attached to spokes and wheels constituting part of the base portion 10 of the swivel chair C of Bowman, it seems obvious that the hub 11 is incapable of functioning as a bushing. Consequently, the appellant fails to see how the hub 11 (or 11a,11b) can be construed as part of a bushing.

While the Patent and Trademark Office is entitled to give claims their broadest reasonable interpretation, it is improper for the Patent and Trademark Office to rewrite a prior patent by assigning a name and function of its own choosing to a component set forth in the patent. This is exactly what the Patent and Trademark Office has done in the present case by renaming the hub 11a,11b of Bowman an outer sleeve of a bushing.

B. In *Response to Argument* on page 4 of the Examiner's Answer, the Examiner additionally states the following with reference to claim 14:

"Integral unitary structure" is taken to mean a whole unit, therefore, the inner sleeve, outer sleeve (ref. 11a,b) and ribs of Bowman, together, form a whole unit making up the bushing.

The Board's attention is here respectfully drawn to *In re Charles P. Morris, Kenneth L. Potterbaum and John D. Stricklin*, 127 F.3d 1048; 44 U.S.P.Q.2d 1023. In an opinion dated 10 September 1997, the Court of Appeals for the Federal Circuit stated the following in affirming the decision of the Board:

The examiner stated in his third rejection that he interpreted the phrase "integrally formed as a portion of a selected area of the support member" to read on Brown. By this the examiner clearly meant that he interpreted the phrase "integrally formed" to encompass devices that had a compliance area <u>fixedly</u> attached to a support member. (emphasis by the appellant)

The Court subsequently went on as follows:

We conclude [\*\*21] that the PTO's interpretation is reasonable in light of all the evidence before the Board.

Thus, the appellant's claim 14, as well as the appellant's claims 2, 4 and 16, which call for the inner sleeve, outer sleeve and fins to be an "integral unitary structure", require fixed attachment of these three components to one another. In contrast, the bushing 14 and splines 18 of Bowman are not fixedly attached to the hub or so-called outer sleeve 11a,11b.

Nor can it be obvious to fixedly attach the bushing 14 and splines 18 of Bowman to the hub 11a,11b. The objective of Bowman is for the bushing 14 to be self-centering in the eccentric bore of the hub or so-called outer sleeve 11a,11b and, to this end, it is mandatory that the splines 18 of the bushing 14 be capable of shifting relative to the hub or so-called outer sleeve 11a,11b.

It follows that claims 2, 4, 14 and 16 are neither anticipated by nor obvious from Bowman.

C. In Response to Argument on page 5 of the Examiner's Answer, the Patent and Trademark Office states the following with reference to claim 1:

Chang's bushing limits rotation to a certain degree, i.e. beyond the position of perpendicularity of the upper foot surface 28 and the carrier plane, and not completely eliminate rotation-limiting function.

Merely replacing one type of bushing (Chang's) with another type of bushing (Bowman's) would be obvious functional equivalent. A bushing is there to guide or reduce friction between two elements, thus, both types of bushing of Chang and Bowman perform the same intended function of a bushing so replacing one with the other does not modified the invention of Chang or Bowman.

Here, the appellant fails completely to grasp the reasoning of the Patent and Trademark Office. Chang specifically designs the connection assembly 64 to <u>limit</u> rotation. On the other hand, the bushing 14 of Bowman is designed for <u>unlimited</u> rotation. How are the connection

assembly 64 and the bushing 14 equivalents and how can it be obvious to nullify the explicit intent of Chang by replacing the connection assembly 64 with the bushing 14?

D. In *Response to Argument* on page 6 of the Examiner's Answer, the Patent and Trademark Office makes the following assertion with reference to claim 17:

One can have four wide enough ribs or splines to cover the circumference of the hub to self center the device. Bowman teaches more than four splines or ribs 18 as shown in fig. 4, to increase frictional force between the inner sleeve and outer sleeve. However, if one wishes to not increase frictional force between the sleeves, one can have less number of splines or ribs 18, which ribs have to be made wider in width for self centering. The number of splines or ribs would depend on the amount of frictional force one wishes to have between the sleeves.

To begin with, Bowman does not address frictional force and the thrust of the reference is to have the bushing 14 and splines 18 be self-centering. From an examination of FIG. 4 of Bowman, it will be appreciated that, for proper self-centering, it is important for neighboring splines 18 to contact the hub 11a,11b at closely spaced locations. Inasmuch as Bowman makes no mention of frictional force, and inasmuch as satisfactory self-centering would appear to be predicated on the splines 18 contacting the hub 11a,11b at closely spaced locations, it follows that Bowman does not motivate one of ordinary skill to reduce the number of splines from that shown by Bowman

Furthermore, the assumption that it would be obvious to reduce the number of splines of Bowman to four ignores the physical reality of the situation. In this regard, the Board is respectfully requested to visualize four splines 18 sufficiently wide to cover the circumference of the bore in the hub 11a,11b of Bowman. Such splines would be so massive that their ability to deform would be limited and the splines would be incapable of carrying out the self-centering function desired by Bowman.

In view of the foregoing, it is once again respectfully submitted that the rejections of the claims should be reversed in their entirety.

Respectfully submitted,

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